

REMARKS

Claims 12-23 are in this application. Claims 1-11 have been cancelled and claims 12-23 have been added. Applicants preserve all rights to file one or more divisional applications directed to the subject matter of claims 2-11.

Support for claims 12 and 13 is found on *inter alia* pages 3 and 4. Support for claim 14 is found on *inter alia* pages 3 and 4. Support for claim 15 is found on *inter alia* pages 3 and 4. Support for claim 16 is found on *inter alia* pages 3 and 4 and example 5. Support for claim 17 is found on *inter alia* pages 3 and 4. Support for claim 18 is found on *inter alia* pages 3 and 4 and example 6. Support for claim 19 is found in example 1. Support for claim 20 is found in example 4. Support for claim 21 is found in example 7. Support for claim 22 is found in example 8. Support for claim 23 is found in example 9.

The Examiner rejected claim 1 as being anticipated by Pappo (US Patent 3,323,481) and by Laubach (US Patent 2,794,033). Applicants respectfully traverse these rejections.

According to the Examiner, both of these references disclose a hydrogenation catalyst comprised of calcium carbonate and palladium. In view of the new claims submitted herewith, it is respectfully requested that these rejections be withdrawn.

The disclosure of a hydrogenation catalyst comprised of calcium carbonate and palladium does not anticipate nor make obvious a hydrogenation catalyst such as those claimed in this application. There is no suggestion in these references that a catalyst other than one which is composed of calcium carbonate and palladium can be used to hydrogenate a 1,4 butynediol to a 1,4 butenediol. US Patent 2,794,033

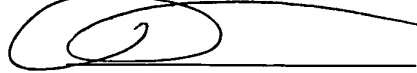
discloses the use of Raney nickel or a poisoned palladium catalyst to reduce 11,14 steroid peroxides to compounds bearing hydroxyl groups in the nucleus at the same C11 and C14 positions. In column 5 it is stated that the poisoned palladium may be prepared by deactivating the palladium with reagents such as sulfur-quinolone, metals like lead and that Raney nickel may be prepared by treating aluminum-nickel alloys with caustic. The only mention of calcium carbonate as a support is in example 1 of this patent. There is no discussion or suggestion that a salt other than calcium carbonate can be used as a support. Given the discussion of the use of a poisoned palladium catalyst, there is no suggestion that any other noble metal can be used. Furthermore, in example 1 the palladium on a calcium carbonate support was deactivated with lead before use in the hydrogenation of isodehydroergosteryl acetate and this results in a different catalyst than what is claimed in this application. There is no disclosure or suggestion in this reference of a catalyst other than the one described above and no disclosure or suggestion that this can be used to hydrogenate a 1,4 butynediol to a 1,4 butenediol. The disclosure of US Patent 2,794,033 does not anticipate or make obvious the claims in this application.

The only catalyst disclosed in US patent 3,325,481 is a 5% palladium-on-calcium carbonate catalyst. There is no discussion or suggestion that a metal other than palladium can be used or that a support other than calcium carbonate can be used. In addition the catalyst is used to prepare steroids. Therefore, this reference does not anticipate or make obvious the claims in this application.

Therefore, it is respectfully requested that the rejection be withdrawn.

Applicants submit that the present application is in condition for allowance and favorable consideration is respectfully requested.

Respectfully submitted

A handwritten signature in black ink, appearing to be "Janet I. Cord", is written over a horizontal line. The signature is enclosed within a large, hand-drawn oval.

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